

Sustainability: What Are WEEE Thinking?

Sims Recycling Solutions

March 9, 2011 C. Coutts

Agenda

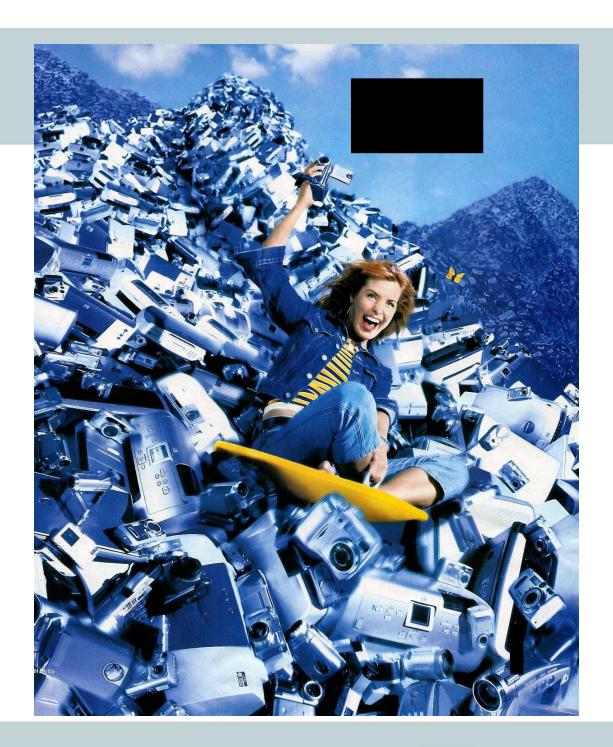
- 1. The E-Waste Issue
- 2. Electronics Recycling at Sims Recycling Solutions
- 3. Challenges and Lessons Learned
- 4. Path forward



Factors that drive Sustainability

- Driven by a few individuals and their passion
- Supported at senior levels
- Need a somewhat entrepreneurial environment
- Need to invest in education
- Need to tell stories
- Perseverance
- Constant feedback mechanisms









The E-Scrap Issue

- •In Canada the volume of e-scrap reached 225,000 tonnes in 2010
- •50-80% of all e-scrap generated in North America is shipped to developing countries, while the remainder is land filled
- •Electronics contain a variety of materials that can pose problems to human health and the environment if not managed properly at end of life
- Only 11% of Canadian e-scrap is currently recycled properly
- Electronics recyclers vary, it is important to know where your materials are going



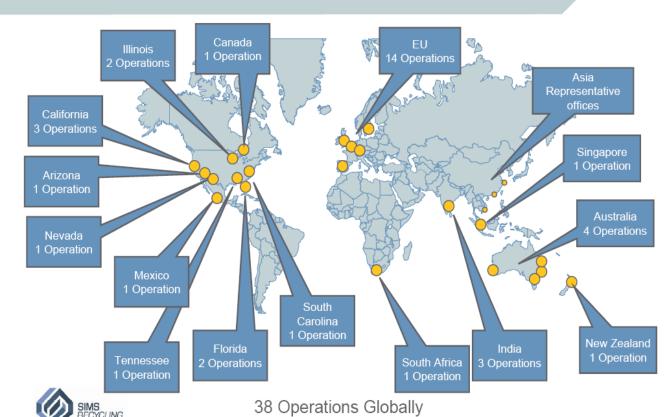






Who is Sims Recycling Solutions

- •Sims Recycling
 Solutions is part of Sims
 Metal Management, the
 world's largest metal &
 electronics recycling
 company
- Headquartered in Australia
- •7500 employees globally
- Publically traded on the Australian and New York Stock Exchange (SGM) (SMS)











40 Electronics Recycling Facilities Worldwide





Sims Recycling Solutions Canada Overview

- Extensive Security and Brand Protection
- Largest Global Footprint
- Certified destruction
- Downstream accountability
- Sites are fully permitted
- No prison/child labour
- Publically traded, SOX compliant
- R&D on technology, EHS
- Industry leading SHEC practices
- ISO 14001 (2004) and OHSAS 18001 registered
- Global Management team involved in WEEE and Asset Management policy at the international, national and regional levels
- Full asset management service operator

Protecting our PEOPLE, the ENVIRONMENT, and our customer's BRANDS







Leading the Way

100 MOST SUSTAINABLE CORPORATIONS 2009, 2010 &2011 WINNER

- The Global 100 is a list of publicly-traded, MSCI World-listed companies that, based on research and analysis by Innovest Strategic Value Advisors, have the best developed abilities, relative to their industry peers, to manage the environmental, social and governance (ESG) risks and opportunities they face. For more information log on to www.global100.org
- Participants in Carbon Disclosure Project (CDP6)
- Listed on Dow Jones and FTSE4Good Sustainability Indices

Growth

\$ millions in new green investment

200 new green jobs

Local solutions to waste issues

State of the art technology development globally

Maximizing resource recovery and reuse; higher recycling rates at better economics

Management of human health and environmental hazards



Sims Newest Recycling Facility - Canada

Sims Recycling Solutions opened a new 290,000 sq./ft. facility in Mississauga

CRT Processing Line

Plastics Separation Technology







Broad Challenges – E-waste as a proxy for a sustainability model

- Establishment of harmonized e-waste recycling standards
- Public private cooperation
- Enforcement
- Harmonization
- IPR versus EPR



E-waste Recycling Standards

- General environment, industrial hygiene, safety regulations not enough
- ISO 14001, OHSAS 18000 not enough

Lead to development of e-waste specific standards for ESM

- R2 (US)
- E-stewardship (US)
- EPSC ERS (Canada) 3rd iteration



Electronic Recycling Standards

- To Best Practices
- Not consensus
- Consistent implementation
- 3rd Party Auditing
- Downstream Accountability
- Commodity Definitions





Enforcement

- Canadian, US and EU experience vast leakage of WEEE outside systems
- Definition of commodities
- Transit countries
- Spot unannounced audits



Harmonization

Unfortunately, recycling still considered a subset of waste

Waste is a provincial and state jurisdiction

Domestic: Different responses, programs, regulations, standards in

every jurisdiction

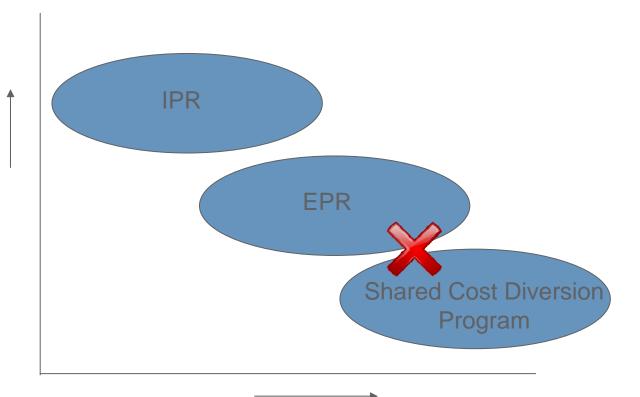
(Canada 13); (US 50)

International: Infinitely more complex (Basel)



Cost vs EPR vs IPR

Sustainable Product Design





Cost of Life Cycle Management

Public Private Partnership Needed

Public Policy Responsibilities

- Ban Landfills
- Backdrop regulations to establish requirement for consumers to pay for collection, transportation and recycling of WEEE
- Manufacturers responsible for collecting and managing funds
- Establish economic incentives for recyclers approved to standard for electronics recycled
- Regulations to require recycling standards with 3rd party auditing
- Government responsible for enforcing recycling standards
- Monitor and control illegal exports
- IPR versus FPR

Private Responsibilities

- If policy direction is correct, recycling market will engage
- If economic incentives set correctly, private entities will invest in better technology solutions diversion
- Meet standard requirements



Canada defines ESM: EPR and Standards = Stewardship Programs

Successes:

- Backdrop legislation
- Established by OEM manufacturers
- Great standards on paper (downstream auditing)
- •3rd party audited

Challenges:

- •Recyclers audited to standard who don't meet standard leakage issues
- Under collection of WEEE versus targets
- Centralized command and control versus free market response
- •EPR, not IPR
- Monopolistic allocation and manipulation of recycling markets stifled creativity and investment into recycling technology and infrastructure



If you were in charge, how would you make the electronic life cycle more sustainable?